

REMARKS

Claims 1 - 22 remain in the application. Claims 1 and 12 have been amended. No claim has been added or cancelled. Applicant respectfully requests allowance of each of the pending claims.

The Rejections under 35 U.S.C. §103

Claims 1, 3-6, 8, 11, 12, 14-17, 19 and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,687,510 to Esteves et al. (hereinafter referred to as "Esteves") in view of U.S. Patent No. 6,233,439 to Jalali (hereinafter referred to as "Jalali").

The amended claim 1 is directed to a method for estimating a signal-to-noise ratio of a forward traffic channel in a wireless communication system. The method includes a step of estimating an adjustment to convert a signal-to-noise ratio for the pilot channel to a signal-to-noise ratio for the forward traffic channel. Specifically, the adjustment is formed together by a fast correction component and a slow correction component, such that the fast and slow correction components are utilized jointly, instead of separately, when the adjustment is applied.

Neither Esteves nor Jalali teaches the adjustment that is "formed together by a fast correction component and a slow correction component, such that the fast and slow correction components are utilized jointly, instead of separately, when the adjustment is applied." As the office action provides, Esteves does not mention "two correction components, one fast and one slow" (see, page 2). While Jalali teaches two power

control command streams, they cannot be applied jointly as two components of one adjustment as described in the claimed invention.

Jalali teaches a power control process in a wireless communication system that comprises a base station and a radiotelephone (see, col. 2, line 66 - col. 3, line 1). The base station and radiotelephone communicate using data frames transmitted at various frame rates over traffic channels (see, col. 3, lines 2-4). If the data rate of the last frame is not changed, the base station will use the power command bits in the first stream (see, col. 5, lines 10-12, and FIG. 1). If the data rate of the last frame is changed, the base station will use the power command bits in the second stream for power control purposes (see, col. 5, lines 2-6, and FIG. 1). The application of the first stream or the second stream depends on if the data rate of the last frame is change. This is an either-or condition, and therefore the first stream and second stream cannot be applied jointly. Thus, the first and second streams differ from the fast and slow components of the claimed invention as they are applied jointly as parts of one adjustment.

As such, the independent claim 1 is patentable over the cited prior art references. Accordingly, claims 3-6, 8 and 11 that depend on claim 1 are therefore patentable as well.

For the same reasons discussed above, the independent claim 12 is also patentable over the cited prior art references. Accordingly, claims 14-17, 19 and 22 that depend on claim 12 are therefore patentable as well.

Claims 2 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Esteves in view of Jalali and further in view of U.S. Patent No. 6,661,832 to Sindhushayana et al. (hereinafter referred to "Sindhushayana").

In addition to the limitations set forth in the independent claim 1, claim 2 further discloses that the signal-to-noise ratio for the pilot channel is multiplied by the adjustment to obtain the signal-to-noise ratio for the forward traffic channel. While Esteves and Jalali do not teach the invention as described by claim 2, the office action asserts "at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the estimation of SNR for the forward traffic channel of Esteves in view of Jalali with an adjustment like that of Sindhushayana" (see, page 5). However, Applicant respectfully disagrees with the assertion.

Sindhushayana teaches a circuit for multiplying a desired energy value by a predetermined constant to yield a scaled desired signal energy value (see, col. 3, lines 22-26). The predetermined constant (c) is defined by the following equation:

$$c = \frac{1}{M^2} \frac{I_{or}}{E_p}$$

where I_{or} is the received energy of the desired signal, E_p is the pilot chip energy and M is the number of chips per Walsh symbol (see, col.9, lines 1-29). As shown by the equation, the predetermined constant does not include two components, whereas the adjustment of the claimed invention is formed together by a fast correction component and a slow correction component. Thus, the language "multiplying a desired energy value by a predetermined constant" of Sindhushayana is not comparable to the present

claim language "the signal-to-noise ratio for the pilot channel is multiplied by the adjustment."

As such, the invention as described by claim 2 is patentable over Esteves in view of Jalali and Sindhushayana. For the same reasons discussed above, claim 13 is therefore patentable over the cited prior art references as well.

Claims 7, 9, 18 and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Esteves in view of Jalali and further in view of U.S. Patent Application Publication No. US 2003/0092447 to Bottomley et al. (hereinafter referred to as "Bottomley").

Claims 10 and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over Esteves in view of Jalali and further in view of U.S. Patent No. 5,963,870 to Chheda et al. (hereinafter referred to as "Chheda").

The Examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the Examiner does not produce a prima facie case, applicant is under no obligation to submit evidence of nonobviousness (see, MPEP §2142, Edition 8, May 2004). To establish a prima facie case of obviousness, the following criteria must be met. Id. First, there must be some suggestion or motivation to combine the reference teachings. Id. Second, there must be a reasonable expectation of success of the combination. Id. Finally, the prior art references must teach or suggest all the claim limitations. Id. If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. *In re Fine*, 827 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

As discussed above, the independent claims 1 and 12 are nonobvious over the cited prior art references under 35 U.S.C. §103. Thus, claims 7, 9, 10, 18, 20, and 21, which depend on either claim 1 or claim 12, are therefore patentable over the cited prior art references.

Moreover, the office action provides next to zero factual supports in establishing a reasonable expectation of success of combining Esteves, Jalali and Bottomley or Esteves, Jalali and Chheda. Thus, Applicant respectfully submits that the rejections to claims 7, 9, 10, 18, 20, and 21 as being obvious are improper.

CONCLUSION

Applicant has made an earnest attempt to place this application in an allowable form. In view of the foregoing remarks, it is respectfully submitted that the pending claims are drawn to a novel subject matter, patentably distinguishable over the prior art of record. The Examiner is therefore, respectfully requested to reconsider and withdraw the outstanding rejections.

Should the Examiner deem that any further clarification is desirable, the Examiner is invited to telephone the undersigned at the below listed telephone number.

Respectfully submitted,

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